Alaska Earthquake

Q: Let's talk for a few minutes about the Alaska earthquake, 27 March 1964, a huge earthquake in south–central Alaska. The Corps of Engineers became involved. How did you become involved in events there?

A: Not initially; it was about six weeks later. Initially, after the earthquake, the Corps responded by sending a bunch of folks up for damage assessment, much like we did recently in Loma Prieta, the San Francisco earthquake. After the damage assessment phase was over, people were put out to do various things and take various parts of the renovation. It was decided, I suppose here in USACE [U.S. Army Corps of Engineers] headquarters, on the request of the North Pacific Division Engineer, that we ought to send some people up there to augment the force. The assessors had probably gone home, at least for the most part. So, five captains were alerted. I was told, I guess maybe Wednesday, Thursday of one week, that "I think we're going to send you to Alaska for a couple of months to participate in the work there as a follow-up to the earthquake."

So, five of us were sent from various parts of the Corps. I met Captain Jack Sullivan, who came out of Tulsa District, in the Seattle Airport as we boarded the same plane to fly to Anchorage. Later Captains Al Hight, Joe Yore, and Jim Scott, all assigned somewhere in the Corps, came up. Colonel Trev Sawyer was the district engineer. What followed over the next two, two and a half months was really one of the most interesting experiences I've had in the Corps.

Q: What was your assignment there?

A: Colonel Trev Sawyer was a great gent, one of the great leaders. He was helpful as a mentor to me, even from a distance, because this was my most direct interaction with him. He started our experience right. Jack Sullivan and I arrived in Anchorage, I think it was a Friday evening. Colonel Sawyer made a car available to us and put us up in the Elmendorf Air Force Base BOQ there. Also, there was a district person to take us out to see the damage in the Turnagain housing area, which was one of the well-pictured things. We'd all seen pictures of the houses that disappeared down the slope, with the great chunks of earth rising and falling.

So, we toured around; we had a real feel for the town of Anchorage and the damage that occurred. We saw the buildings where the slabs fell to the ground and saw the holes where some of them had already been demolished even before we arrived.

Then we were assigned out to various places, and I went to Kodiak Island. The others stayed on the mainland, so I was out the farthest distance. There followed an experience for me that almost could be out of a Bret Harte story.

Now, to set the stage, what happened in Kodiak was that the island dipped about six or seven feet on an angle. On the side of the island where the town of Kodiak is located, a town of about 3,000 population, it dropped about six or seven feet. Then the tsunami, the tidal wave, came roaring in, breached a breakwater, and roared into the middle of town, going six or

seven blocks up into the town, wiping out buildings and carrying the small craft that were in the middle of that harbor into town and depositing them. Some of them were big fishing boats. Even when I arrived six weeks later, there was a huge boat—I hate to guess, 40 feet, 50 feet long—sitting in the middle of the town.

Then the wave went back out, breaching the other breakwater. So, there was no longer a harbor; that is, the breakwaters were down, and all the moorings in the interior of the harbor were gone. I think there were something like 39 lives lost on Kodiak Island itself.

The channel between the town of Kodiak and the island next door had actually gone dry with the pull-back of the water before the tsunami came in. Boats had dropped and hit the bottom of the channel before they were then picked up and swept into town. So, it was a pretty violent bit of energy that hit Kodiak.

My job in Kodiak was to rebuild the harbor. The Corps had a project under our PL–99 responsibilities, which similarly exist today, to rehabilitate work that we'd built originally. So, I was there as the project engineer for the contract to rebuild the breakwaters. The contract provided for the construction company to bring in huge rock and rebuild the breakwaters. That was really the job, but there were other aspects too.

First of all, Colonel Sawyer was piqued at the Navy because the Kodiak Naval Station, maybe Naval Air, was just a few miles away down the coast. Right after the earthquake he called the Navy folks and said, "Look, we've got all these damage assessment people coming up. They're available to come out if you want them." They said, "Sure, send them out." He put them on a commercial aircraft, flew them into Kodiak, and the Navy met the airplane and said, "We don't need you; go home now." They wouldn't even let them get off the aircraft. So, he was really piqued by that because he'd acted in good faith.

So, he said to me, "Oh, by the way, when you go out there, I want you to know you represent the Corps of Engineers. So, we're going to do a bang-up job." I recognized that he wanted to put a little competition into this atmosphere.

So, when I arrived I found out that to get the job started, the contractor had to develop a quarry on the back side of the island to bring the rock down to the harbor. But, as mentioned, my duties were being the Corps of Engineers rep on Kodiak as well.

Now, in the downtown area the damage was being taken care of by other federal agencies: the Federal Emergency Management Agency of its day; the Small Business Administration to provide monies to rebuild homes. Because the Navy was on the island, the Navy was given overall defense responsibility for all of that, not the Corps. When all of these folks would come to town, the fact-finding teams and the architect/engineer firm doing master planning for developing the new central business district—I'd go to all the meetings and participate with them representing the Corps.

I wore my fatigues and my hard hat with "Corps of Engineers" on it. We put up our project sign downtown as we built the harbor right by what had been the main street, so everybody

could see the project we were responsible for. I lived at the local Kodiak Hotel, which had 11 rooms, 3 with baths—I had one of those.

I would get missions from the district like, "We are now designing the new moorings, floating moorings. Go out and survey the harbor." Now, how am I going to survey the harbor? Well, you heard what happened in Vietnam—piece of cake once you've been over advising Vietnamese and trying to make things happen. So, I went to the contractor and borrowed the level and rigged up a sounding weight. By this time the Corps had sent two civilian inspectors out to work for me, so we had two shift inspectors. We set up a weigh station down the main road to weigh the rock when it came in because we were paying by weight. So, we borrowed a small boat and set out and sounded and surveyed that harbor. We then sent the survey back in to the district so they could design the harbor.

This was really a tremendous cultural experience as well because we really were on the fringe of frontier America. The people that were there on Kodiak Island had once been in the West and then migrated up to Portland and Seattle. Then when that became too civilized for them, they moved on up to Anchorage. That became too civilized so they moved on out to Kodiak. It was like reading characters out of Bret Harte's stories of the Old West. I mean, they were salt-of-the-earth kind of people. The people who ran the Red Cross operation in the immediate aftermath of the tsunami, with its loss of life—the blankets, the donuts, the coffee, the blood—I mean, they did this stuff, and were common, ordinary folks. The volunteer head of the Red Cross drove a truck for the construction company. They picked him up as a truck driver after things calmed. Really neat people. I really liked talking to them.

I would go down to the main bar on Saturday night, which is where the whole town went for their Saturday evening entertainment. Everybody would be in there dancing and sitting at the bar and cutting up, but it was not ventilated. I mean, the smoke, cigarette smoke, was so thick you could cut it. Today, half of our folks couldn't tolerate it. It was not even tolerable then, and I was a smoker then. Everybody in town was there and you'd see all these people. Then you would walk out of this club at 1:00 or 2:00 in the morning and it'd be light because it was summer and the midnight sun.

I'd take my meals at various different restaurants. One of them was called the B and B, for Booze and Beer. Another one was across the street. I don't remember the name of it, but I remember it had a sawdust floor. On the one side there was a counter and stools and a few booths, and on the other side there was the bar. Out front on benches would be men who were out of work. During the right season they worked the crab boats—king crab was big on the island. They'd get paid, come in at night and buy everyone a round at the bar. For the other several months of the year they'd sit out there hoping somebody would come by and remember and buy them a drink at the bar. They had great fish to eat there so that's where I'd have my evening meal, and then I'd walk back to the hotel two blocks away.

It really was like I was living in the Old West. I remember a discussion one night. This one group of folks that I was talking to were so irate because the town had just passed a city ordinance that you could no longer abandon your refrigerator or stove in your front yard. This

infringement on their rights was felt so strongly—civilization was taking over the town; it was time to move on again. So, it really was a neat experience.

Anyway, my job for about six weeks was to work this project, and we did. About the end of my time, Colonel Sawyer asked me to extend another couple of weeks because the Chief of Engineers, Walter "Weary" Wilson, was coming up to visit the projects. Colonel Sawyer thought maybe I wouldn't mind being there to show my project off to the Chief when he came. So, I elected to stay. We had it all arranged that day. I'd borrowed a bus from my friends at the Naval station, a school bus, the best way to take people around. We were sitting on the runway waiting for him to come in, and then the plane pulled up from its landing approach and took off again. We had a radio call that said they had developed a hydraulic leak and were going back to Anchorage and weren't going to come in.

I released the school bus, jumped into my little pickup truck, and headed back into town. As I hit the ridge road I looked around, and here comes that airplane in a landing pattern again. So, I whipped around and turned back and roared back to the airfield. By the time I got there the plane had landed, come to a stop, and so I whipped on up to the airplane. What had happened was they were losing hydraulic fluid so quickly they figured they had to come back. They blew all the tires on the landing and skidded to a stop. They were sitting right in the middle of the runway when we pulled up.

So, I didn't know what to do now. The Navy had sent their officer of the day back, but he was coming back now. He at least had a radio so we could call and get the school bus back. Colonel Sawyer was aboard. As I pulled up, they were all standing around the airplane already, just looking at it, wondering what was going on. So, we conferred and decided we'd go ahead with the inspection trip—somebody better try to get another airplane.

There was a lot of anxiety and people were, you know, a little up-tight. "We've got the Chief of Engineers on our hands; what are we going to do with him?" The most calm, nonplussed person about was General "Weary" Wilson, who sat there puffing on his pipe and taking things all in stride like he'd been through it many times before. So, we all got in the school bus and took a tour around.

Two other things had to take place. One was that we had to load all of the luggage, his luggage, onto the school bus. I thought, "Well, this is kind of weird. We're just going to run around for a couple of hours, he'll get another plane and then—." Some years before, he'd been separated from his luggage, and so his standard procedure was, "My luggage stays with me. So, they might fix this plane and take it away and then where am I going to be?" So, we took time for the luggage.

Then there were the fish on board because they'd come from King Salmon and they had a lot of fish in the hold. So, before we moved, we had to do something with the fish, and there were a lot of fish. The Navy scrambled a pickup truck and we chucked the fish into the back of the pickup truck. It was driven into a big drive-in freezer where it stayed while we toured the island.

So, we made our tour, came back, and General Wilson went on his way, and I had an interesting experience.

After that, then, I closed out. We finished the project and it was time to go. One other nice thing happened to me then. Colonel Sawyer said, "You know, if you just stay one more week, now, my new deputy district engineer's arrived and we're going to send him on his introductory tour around Alaska. Since you've been stuck off in Kodiak all along and since you stayed those extra couple of weeks for General Wilson, you know, I'll give you a slot on that airplane and you'll get to see a bit of Alaska you wouldn't otherwise."

That sounded like an awful good idea, and so I did and had a tremendous trip. We went up to Fort Greeley and into Galena Air Force Base, saw those permafrost piles that the Cold Regions Research and Engineering Laboratory had developed years before, that I had read about. It was right out in the middle of nowhere. I mean, absolutely nowhere. From Galena we went to Unalakleet and then to Kotzebue up north beyond the Arctic Circle where they had early warning radar stations that had been built by the Corps. We came south and landed at Nome, thinking of all that I'd ever read about Nome. We saw the old gold dredges still sitting out in the lakes around there. We flew down to King Salmon, flying a little amphibious airplane the whole way through fog, for hours. We landed there, then flew on back into Anchorage. So, I had a really nice trip around, got to see a lot of Alaska, got to see a lot of Corps projects, and got to see the kinds of things you do when you send people out in small groups, out at the end of the supply line to do good work. It was a very nice experience.

Then I flew back to Chicago and finished up my tour as deputy district engineer.

Q: Did you have to do any kind of an after-action on your project or experience?

A: I don't recall. I'm sure I had to write something up to send to the Alaska District. Usually I keep something of everything, and I didn't keep anything from there. So, maybe it was just project notes.

Q: Was the work pretty routine, restoring the harbor? Did you have any particular problems or difficulties?

A: We had difficulties because the contractor was trying to do it on a shoestring. He tried to do the project too quickly. He got into the quarry and pushed his overburden down and then he loaded his shot and dropped the rock right on top of the overburden. Then he put his crane shovel in on top of that, and the shovel sank down into the overburden that he had pushed down there. So, he had a mess and he fell behind schedule. Then his trucks were supposed to be equipped for safety with a secondary brake system. He drug his feet on doing that and kept putting it off day by day till I stopped his project. Four days later he had them all done so he could finish up his project.

I learned a lot about dealing with contractors and working with them. We had to reject many loads of rock because he was throwing in some of the overburden. So, we had to play a little hardball with him here and there.

Brigadier General Raymond J. Harvey (left), Assistant Commandant of the Engineer School, presented the Army Commendation Medal to Captain Kem for his work during the Alaska earthquake in October 1965. Ann Kem is on the right.

Q: In Alaska you got some of the field experience that you might not have gotten in Chicago if you had—

A: That's right. That was the construction piece I did not get in Chicago.

Q: Sometimes there's talk about, for emergency situations like this, identifying key people with experience that could be pulled in to work on recovery. That wasn't part of your going to Alaska, I guess, because you didn't have that experience and you were all captains. Do you think that would be a good idea? I'm not really aware that we've really done that in practice too often later on. I worked on Agnes in '72, our history of that, and they talked about having a "ready district," you know, for people at all levels, and just how it would work. Then when it happened they could go here and go there and people would have the experience.

So, based on this, what would you think about the value of that kind of thing, or does it matter?

A: Well, I'm not sure it really matters. I think it does from the standpoint of knowing, but I think the Corps has got such a great bunch of professionals that, certainly to do the job I was doing, you can take the basic professional and make it work. You're going to go to each district to do that and ask them to identify, as I was identified, five captains. I mean, that doesn't mention all of the civilian professionals that had already gone as part of the Alaska earthquake recovery. I suppose those were done through the system by asking folks to nominate and look for volunteers or look for certain skills just as we do today. So, I think we have the capability to do that very well.

I'm not so sure that any one experience then qualifies you for the next experience. Yes, I'd been through it, but would I know beforehand that you've got to deal with these folks in Public Affairs? It was easily identifiable wherever I was later that I had those kinds of experiences. I think we have the ability to communicate and find out these things. I don't think you can have a ready district or a ready team that's on standby ready to go. I think, as we demonstrated in Loma Prieta by mobilizing 350 Corps folks over a weekend, we can get the right people there in almost no time at all, if somebody alerts us and tells us what they want.

Advanced Course, U.S. Army Engineer School

Q: Around March of 1965, then, I guess you go back to Fort Belvoir for the advanced course, is that correct?

A: Yes.

Q: After having company command, or the equivalent, really.

A: I had not had company command.

Q: Had been an adviser in Vietnam.

A: Yes. Well, by this time I'd come out on the majors list, like I mentioned. Actually, I returned from Alaska and somebody said, "We saw your name on the majors list." I said, "I don't think so." I certainly wasn't aware of lists or eligibility or even what "below the zone" meant at that time, as opposed to today. I guess you get the feeling today like everybody knows where they stand, but that wasn't on my screen at the moment.

So, we got the list and looked it up and I was. I called to verify it, and sure enough that was me. So, then I said, "Well, look, guys, you better get me the company command quickly. I mean, first of all, here I am in my ninth year, I'm just going the advanced course. I'm already late. I really ought to go to company command." They said, "Nope. You've got to go to